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LIST OF MAMMALS
FOUND IN THE VICINITY OF GRAND
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Late U. S. Army.



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LIST OF MAMMALS FOUND IN THE VICINITY OF GRAND RIVER,
D. T. BY W. J. HOFFMAN, M. D., LATE U. S. ARMY.

The Military Post at Grand River,¹ Dakota Territory, was established May 20, 1870. It is situated on the western bank of the Missouri River, one hundred and eight miles, by land, south of the present terminus of the Northern Pacific Railroad, and three hundred and seventy miles north of Yankton. The valley of the Missouri was well timbered in this vicinity prior to 1870, but since that time the groves of cottonwood and oak have been gradually cut away, affording but scanty shelter for many animals seeking them during the cold season. Grand River, Oak Creek, and several smaller streams emptying into the Missouri from the west, are often nearly dry courses during the summer; but as we ascend to the distance of fifty or sixty miles, we find them containing a greater amount of water than nearer the mouth, and running through broad well-timbered valleys. At such localities many of the larger mammals

¹ Approximate astronomical position is Long. 100° 12' W., Lat. 45° 31' N.

are still found, unless the resident Dakotas have been on a hunt, when few escape unless they take to the surrounding prairie. The prairie is undulating, and at times hilly, destitute of wood (except small quantities in the ravines and washes leading down to the timbered bottoms) but covered with short grass, frequently with grease-wood (*Obione canescens*), sage brush (*Artemisia canadensis*), cactus (*Opuntia missouriense*), etc. The western horizon is bounded by a range of bluffs, the more elevated peaks of which are frequently used by the Dakota Indians for signal stations.

To most of the following named species are added the local names in Dakota, the Tetonwan dialect of that language being generally spoken around the Agency. The italicized *n* is nasal; *ich* is sounded as in German *nicht*; vowels as in Continental languages generally.

FELIDÆ.

1. **Felis concolor** Linn. American Panther. In-mu-tan'-ka.

Occasional specimens are captured in the oak groves on Oak Creek. The skins are seldom brought to the trader's store to exchange, as they are valued by the Indians in the manufacture of quivers.

2. **Lynx rufus** Raf. Bay Lynx; Wild Cat. In-mu-cho'-ta.

This species is of frequent occurrence throughout the valleys. A large specimen was shot within half a mile of the Post, where she had been watching for her prey near a beaver dam.

CANIDÆ.

3. **Canis lupus** var. **occidentalis** Allen. Gray Wolf; Timber Wolf. Shun'-ka-to-ki'-tcha.

Rather abundant, and is usually found in the wake of a pack of coyotès. The coloration varies greatly, in fact so much so that different local names are applied to the same species on that account. It is frequently the case that a pedestrian will meet these animals along the *coulées*, and on firing at them, if they are not hit, they will remain in one position until their curiosity is satisfied, when they will walk off deliberately and slowly. This, however, is not the case when they are hungry, at which time they become extremely fierce and bold. They have been known to enter the Indian villages at night and attack the dogs.

4. **Canis latrans** Say. Prairie Wolf; Coyotè. Shun'-ka-mon'-i-tu.

Everywhere common. Large numbers are attracted to the Agency corral, where the offal is left after the Indians receive the weekly allowance of beeves — usually one hundred head. Many hundred skins are annually brought to the trader's, where they receive a worthless trinket in return for each. Occasional specimens have been shot from the windows of the out-buildings. Various attempts at domestication have failed.

5. *Vulpes fulvus* Rich. Red Fox. Shun'-ka-dan.

Not found near the settlement. Sometimes found by the Indians near the headwaters of Grand River and Oak Creek. Few skins are sold, as the Indian women retain them to make pouches and bags.

6. *Vulpes fulvus* var. *argentatus* Aud. and Bach. Silver Fox. Shun'-ka-dan'-ska.

Extremely rare. Have seen no skins among the tribes, but I was told that this animal was of frequent occurrence before any of the Agencies had been established.

7. *Vulpes velox* Aud. and Bach. Kit Fox; Swift.

Not found nearer than the Big Horn Mountains or the Black Hills, although they formerly existed here. Visiting "hostiles" sometimes have skins for sale or barter.

MUSTELIDÆ.

8. *Mustela americana* Turton. American Sable. Pine Martin. Nak'-pa-gi'-tcha.

Apparently not numerous. I saw several specimens eight miles west of the Post, but they are more frequently met with further inland along the streams.

9. *Putorius longicaudus* Rich. Weasel. Hi-tan'-ka-san.

Rare near the Agency, but found both above and below, on the Missouri bottom-lands.

10. *Putorius vison* Gapper. Common Mink. Dök-sin'-tcha. More frequently found than the last, but by no means common.

11. *Putorius nigrescens* Aud. and Bach. Little Black Mink.

Have not seen any specimens or skins. Old hunters describe an animal at one time found here, which *may* be the species in question.

12. *Gulo luscus* Sab. Wolverine.

Occasionally found near the head waters of Oak Creek.

13. *Lutra canadensis* Sab. American Otter. Ptan.

Very rarely found. Sometimes a skin or two find their way to the trader's during a season.

14. *Mephitis mephitica* Bd. Skunk. Ma'-ka'.

Not very common. These animals are killed by the Indians, though they seldom cure the skins on account of the fetid odor accompanying them.

15. *Taxidea americana* Waterh. American Badger. Cho'-ka.

Common at the prairie-dog towns eight miles northwest of the Agency. The Indians make tobacco pouches of the skins.

URSIDÆ.

16. *Ursus horribilis* Ord. Grizzly Bear. Ma-to'-cho-ta.

At one time they were found between Grand River and Ft. Rice; they are still known to occur rarely in the *Mauvais*es Terres, and to be common in the Big Horn Mountains, Montana. A necklace made of the claws is considered by the Indians to be worth two horses—about fifty dollars.

17. *Ursus americanus* Pallas. Black Bear. Wa-chan-ksi'-tcha.

Same as the last, though skins appear to be more common amongst the aborigines. The fat of the paws is highly prized by the women, who mix it with the finely chopped hair of the tail of *Cervus macrurus*. After this mixture has been fried, it is employed to produce abortion. It may produce severe gastric irritation, which might cause such a result. Such is the general belief, and if true, the dose is really a disgusting one.

18. *Ursus americanus* var. *cinnamomeus* Aud. and Bach. Cinnamon Bear.

The Indians state that the only place where this animal is met with is in the Black Hills, and in the Big Horn country. Saw a single robe brought to the Post, that was badly worn.

SCIURIDÆ.

19. *Sciurus hudsonius* Pallas. Red Squirrel. Tash-na-he'-tcha.

Sometimes found in the oak groves eight miles west of the Post. This animal is found, upon comparison, to be identical with Pennsylvania specimens, although it was considered otherwise by some of the old settlers and trappers.

20. *Tamias quadrivittatus* Wag. Missouri Striped Squirrel.

Rather common on the plains and river bottoms where there are any moist places, and where shrubbery occurs. It usually burrows

under a cluster of small bushes, or along-side of an old stump where the soil is loose.

21. *Spermophilus tridecem-lineatus* var. *pallidus* Allen. Striped Gopher.

Not common. Found sometimes on the prairie west of the Agency.

22. *Cynomys ludovicianus* Bd. Prairie Dog. Sho-sho'-na.

A large town or colony of these animals is located about eight miles northwest of the Agency. The nearest point to water is over two miles, but this distance from water is common, as the burrows are generally found in the most barren portions of the plains. The area covered with deserted holes and hillocks, in addition to that section at present occupied, exceeds four square miles. I have yet to find any instance where the burrowing owl (*Speotyto cunicularia* var. *hypogæa* Coues) occupies any but the deserted burrows, notwithstanding numerous random assertions to the contrary. The same applies to the rattlesnake (*Caudisona confluenta* Say), except in case where they are in search of the young prairie dogs for food. The animals are very readily domesticated. The skins are much used by the Indians for pouches, being often handsomely ornamented with beads or porcupine quills.

23. *Castor canadensis* Kuhl. Beaver. Chap'-pa.

The only locality where this animal was observed was in Oak Creek, one mile from the Agency. Skins are frequently obtained from the Indians, who secure them at various points on the streams, at from ten to fifty miles inland. The enlisted men had succeeded in taming several, but experienced difficulty in keeping them in captivity.

SACCOMYIDÆ.

24. *Dipodomys ordii* Woodh. Jumping Rat. Sin'-te-shda'.

* Genl. D. S. Stanley informs me that he has captured this animal at Fort Sully, eighty miles south of Grand River. I have not observed it at the latter place, although skins are frequently found among the collections of pelts brought here by the Indians. They may have obtained them further west, as I saw numbers of them in the Valley of the Yellowstone. See also Prof. J. A. Allen's "Notes on the Nat. Hist. of portions of Montana and Dakota"; (Proc. Boston Soc. Nat. Hist., Vol. xvii, June, 1874, p. 12).

GEOMYDÆ.

25. *Thomomys rufescens* Maxim. Fort Union Gopher. Mau-i'-tcha.

Rarely found. Appears more common in the valleys of the Yellowstone and Upper Missouri.

HYSTRICIDÆ.

26. *Erethizon dorsatus* var. *epizanthus* All. Porcupine. Pa-hin'.

Common in the timbered bottoms in Oak Creek. This animal is rapidly disappearing on account of the Indians, who prize the quills very highly, and employ them in the ornamentation of almost all wearing apparel, and trinkets, pouches, etc. The only living specimens were those domesticated by the enlisted men, and they are disagreeable pets on account of the odor.

MURIDÆ.

27. *Mus musculus* Linn. Common Mouse. Ki-tun-ka-dan.

This animal made its appearance soon after the Post was established, and they have steadily continued to increase since that time. Specimens have been found in the wood-choppers cabins, forty miles northward, which were no doubt carried there in cases of goods or with sacks of grain.

28. *Fiber zibethicus* Cuv. Muskrat. Sink-pe'.

Not rare, excepting in the immediate vicinity of the Agency.

LEPORIDÆ.

29. *Lepus campestris* Bach. Prairie Hare. Mas-tin'-tcha.

Scattered over the prairie during summer, but as the cold weather sets in they are forced down into the bottom lands, where they are often secured for the table.

30. *Lepus callotis* Wagl. Jack Rabbit.

Of common occurrence, though seldom found very near the Agency.

CERVIDÆ.

31. *Cervus canadensis* Erxl. Elk. Wapiti. Ech-a'-ka.

Saw several about forty miles below Grand River, but they have not been found near the Agency since 1869. The Indians often bring in fine sets of antlers, which are secured along the tributaries of the Yellowstone.

32. *Cervus virginianus* Boddaert. Virginia Deer. Tach-in-tcha.

I saw none of this species, but was told that it was common in former years. Several sets of horns in the hospital steward's collection appear to belong to this species, but they were obtained in the Black Hills.

33. *Cervus leucurus* Doug. White-tailed Deer.

Not found near the Missouri at present, but occurs occasionally in the *Mauvaises Terres* of the Little Missouri River. A pair of antlers in the above named selection shows a remarkable development of intertwined branchlets and snags from the skull upward, to a distance of about eight inches, gradually diminishing. There were no bifurcations of the upper snags, as is the case in *C. macrotis*.

34. *Cervus macrotis* Say. Black-tailed Deer. Sin-te' sa-pe-dan.

Occasionally appears in the valley of the Missouri, but is seldom found nearer than the *Mauvaises Terres*.

CAVICORNIA.

35. *Antilocapra americana* Ord. Prong-horned Antelope. Tach'-tcha.

This is the most common of all the larger mammals, and frequently specimens are shot from the stockade when they come down to the river to drink. During the summer of 1873 a fatal epidemic raged among the prong-horns, which Prof. Allen¹ thinks destroyed from three-fourths to nine-tenths of the animals along the surveyed route of the Northern Pacific Railroad.

This epidemic appeared at the same time with the epizootic, and I believe that to be the cause. The Government stock, as well as nearly all of the Indian ponies, were affected, the greater fatality occurring among the latter. At encampments where the Indians procured water from pools and ponds, and where their horses drank from the same bodies of water, nearly sixty-four per cent. of the Indians were affected with *cerebro-spinal meningitis*, of which ten or twelve per cent. died. If the horse epidemic was not the cause of fatality among the antelope, it is at least a very remarkable coincidence.

At Grand River I observed a horn having two perfectly formed snags, one above the other, so that the upper one was in the usual position while the lower one was about half way between it and

¹ Proc. Boston Soc. Nat. Hist. Vol. xvii, June, 1874, p. 10.

the skull. The Indian who had worn it as a charm informed me that both horns were alike. For a sketch of the specimen, see Proceedings of the Zoological Society of London, Nov. 2, 1875.

36. *Ovis montana* Cuv. Bighorn; Rocky Mountain Sheep.

There is no doubt that this animal was at one time common along the bluffs of the Missouri River. I have frequently found partially decayed horns in the washes and *coulées* in the vicinity of the Post. Horns are often brought in by the Indians, but they secure them either in the *Mauvaises Terres*, or still further west. Old skins are often seen in the Indian settlement, but I have not observed any recently cured specimens.

37. *Bos americanus* Gmelin. American Bison; "Buffalo." Ta-ton'-ka.

This animal disappeared from this portion of the Missouri Valley about 1869. Since that time they have gradually made their course of migration further west, until now they are seldom found nearer than from four hundred and fifty to five hundred miles. The intervening country is filled with old trails. In the summer of 1870 two old bulls strayed eastward, until they got within ten miles of the Agency. Several hundred Indians immediately started out, each hoping to reach them first.

At rare intervals individuals are found having an exceedingly soft, fine skin; these are known as "silk robes," and are valued at about three hundred dollars. Black robes are found, though very rarely. *Melanism* may be considered common when we compare the cases of total *albinism*.

"Grease," Chief of the Cut-Head band of Sioux, is the possessor of a white robe. It is worn by him as a cloak, while the cuttings and odd pieces were made into a cap.

The number of Dakotas registered at the Agency, was thirteen thousand five hundred; five thousand drew rations regularly, while eight thousand five hundred were "hostiles." The resident Indians used many robes themselves, and during the year had but from two to three hundred to exchange at the trader's. The "hostiles," who do most of the hunting, took in one year (1872-73) over thirteen thousand robes to Fort Peck, where they received, at that time, one Winchester rifle for three hundred robes, making the weapon worth about *two thousand dollars*.

The Medical Director of the Department of Dakota informed me that he was positive that the epidemic of small-pox which broke out

in New York City and other localities in the east, originated in Dakota. The tribe afflicted sold their bales of robes, which were shipped to New York. Had the sale been prohibited and the robes burnt, the disease might have been prevented. The Medical Director saw the importance of such a measure but was powerless, for had the robes been burnt they might have charged for many silk robes, bringing the half-breeds and "squawmen" to bear testimony in behalf of the Indians' extortionate demands, in which the case would have resulted.

It is rather singular that there are no representatives of the *Vesperilionidae* in this region. Specimens of several species occur on the Yellowstone and Musselshell Rivers, but they are unknown at Grand River Agency.

